

	Type	Hits	Search Text	DBs	Time Stamp
1	IS&R	0	("sorting and mailpiece").PN.	USPAT; EPO; JPO; DERWENT	2002/10/01 08:50
2	BRS	155	sorting and mailpiece	USPAT; EPO; JPO; DERWENT	2002/10/01 10:07
3	BRS	54	(sorting and mailpiece) and cost	USPAT; EPO; JPO; DERWENT	2002/10/01 09:07
4	BRS	27	((sorting and mailpiece) and cost) and (chargeback n1 accounting))	USPAT; EPO; JPO; DERWENT	2002/10/01 09:22
5	BRS	27	(((((sorting and mailpiece) and cost) and (chargeback n1 accounting))) and (calculating n1 sorting n1 cost))	USPAT; EPO; JPO; DERWENT	2002/10/01 09:47
6	BRS	5	(((((sorting and mailpiece) and cost) and (chargeback n1 accounting))) and (calculating n1 sorting n1 cost)) and charging	USPAT; EPO; JPO; DERWENT	2002/10/01 09:48
7	BRS	5	(((((sorting and mailpiece) and cost) and (chargeback n1 accounting))) and (calculating n1 sorting n1 cost)) and incoming	USPAT; EPO; JPO; DERWENT	2002/10/01 10:09
8	BRS	2	4713761.pn.	USPAT; EPO; JPO; DERWENT	2002/10/01 10:16
9	BRS	152354	mail n1 sorting	USPAT; EPO; JPO; DERWENT	2002/10/01 10:17
10	BRS	155	(mail n1 sorting) and (sorting and mailpiece)	USPAT; EPO; JPO; DERWENT	2002/10/01 10:17
11	BRS	54	((mail n1 sorting) and (sorting and mailpiece)) and cost	USPAT; EPO; JPO; DERWENT	2002/10/01 10:26
12	BRS	1372812	sorting n1 cost	USPAT; EPO; JPO; DERWENT	2002/10/01 10:26
13	BRS	2030	(sorting n1 cost) and postage	USPAT; EPO; JPO; DERWENT	2002/10/01 10:27
14	BRS	253	((sorting n1 cost) and postage) and mailpiece	USPAT; EPO; JPO; DERWENT	2002/10/01 10:27

DERWENT-
ACC-NO: 1988-085631

DERWENT-
WEEK: 200121

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TITLE: Scales using microprocessor - determining wt. based upon evaluation of successive valves to reduce likely pointer deflection required and cost determination time

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PATENT- FEINLANDF, S FREEMAN, G C FEINLAND, S PITNEY BOWES INC
ASSIGNEE: [PITB]

PRIORITY-DATA: 1986US-0909151 (September 19, 1986)

PATENT-FAMILY:

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DE 3731508 C2	April 12, 2001	N/A	000	G01G 019/413N/A N/A N/A N/A N/
DE 3731508 A	March 24, 1988	N/A	009	A N/A
GB 2195460 A	April 7, 1988	N/A	000	
FR 2604255 A	March 25, 1988	N/A	000	
US 4787048 A	November 22, 1988	N/A	008	
GB 2195460 B	October 10, 1990	N/A	000	
CA 1276302 C	November 13, 1990	N/A	000	

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
DE 3731508C2	N/A	1987DE-3731508	September 18, 1987
DE 3731508A	N/A	1987DE-3731508	September 18, 1987
GB 2195460A	N/A	1987GB-0021954	September 18, 1987
US 4787048A	N/A	1986US-0909151	September 19, 1986

INT-CL (IPC): G01G017/02, G01G019/41 , G01G019/413 , G06F015/21 , G07B017/00

ABSTRACTED-PUB-NO: DE 3731508A

BASIC-ABSTRACT:

A trunking system for use in postal applications has a weighing facility in which the load cell of a balance provides an input to an analogue-to-digital converter. This provides digital input to a microcomputer that executes a routine to determine the weight of the item to be posted.

When the postal item is placed on the surface of the balance a cycle of motion occurs, since the unit is

effectively a lightly damped mass-spring-damper system. In order that execution time is minimised the microcomputer executes an algorithm to determine weight based upon successive values.

ABSTRACTED-PUB-NO: GB 2195460B

EQUIVALENT-ABSTRACTS:

A postal scale for determining the appropriate postage amount for a mailpiece as a function of the weight of said mailpiece, said postage amount function having a constant value over at least one range between two predetermined weight break points, comprising: a) means for supporting said mailpiece, said support means providing an instantaneous response to a load placed thereon by said mailpiece; b) transducer means for generating a sequence of digital output signals representative of the instantaneous response of said support means; c) processing means for, in response to said digital output signals: c1) detecting the presence of said mailpiece on said support means; c2) then making a first estimate of the weight of said mailpiece; c3) then testing said first estimate to determine if it is within one of said ranges and if the difference between said first estimate and the closest of said break points exceeds a predetermined amount; and c4) then, if said first estimate satisfies said test, using said first estimate to determine said postage amount for said mailpiece; or c5) then, if said first estimate fails to satisfy said test, making a second more accurate estimate of the weight of said mailpiece, and using said second estimate to determine said postage amount.

US 4787048A

The scale includes a transducer which produces a sequence of digital output signals representative of the instantaneous response of a scale and a microprocessor which detects the presence and weight of mail pieces on the scale. The algorithm used in the scale of the subject invention takes advantage of the fact that postal rate charts are, in general, step-like. The processor examines sequences of digital output signals and makes estimate of the weight of the mail pieces and determines the distance from the first estimate to the closest breakpoint. If the distance is sufficiently great the first estimate may be used safely to determine the appropriate postage amount. If the distance is close a second more accurate estimate is then made and used to determine the appropriate postage amount. ADVANTAGE - Increased speed.

(8pp)

CHOSEN-
DRAWING: Dwg. 4/4

TITLE-TERMS: SCALE MICROPROCESSOR DETERMINE WEIGHT BASED EVALUATE
SUCCESSION VALVE REDUCE POINT DEFLECT REQUIRE COST
DETERMINE TIME

DERWENT-CLASS: S02 T05

EPI-CODES: S02-D02C; T05-C;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N1988-064656